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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/756,380

01/14/2004

Jyrki Laaksonheimo

1381-0307P

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EXAMINER

SMITH, TYRONE W

ART UNIT

PAPER NUMBER

2837

NOTIFICATION DATE

DELIVERY MODE

06/04/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

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Office Action Summary	Application No. 10/756,380	Applicant(s) LAAKSONHEIMO, JYRKI	
	Examiner Tyrone W. Smith	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 10 and 11 is/are allowed.
- 6) ☒ Claim(s) 9, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 9 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al (5828014) in view of Sawai et al (4967128).

Goto discloses a elevator speed control circuit which includes a measuring unit (Figure 9) for measuring a speed value of a motor; a calculating unit (Figure 9 item 2) for calculating averages of a speed reference and a speed measurement from the measured speed value; an identifying unit (Figure 9 item 3 and Figure 9 item 36) for identifying a gain factor and a zero factor', and a correcting unit (Figure 9 item 51) for compensating a drift in the measuring unit, the correcting unit compensating for the drift on the basis of the average of the speed reference, the average of the speed measurement, the identified gain factor, the identified zero factor, and on the basis of a forgetting factor. Refer to the abstract, column 2 lines 21-64 and column 6 lines 44-58.

However, Goto does not disclose the use of a forgetting factor or similar for updating the gain factors.

Sawai discloses a servo motor control device which includes forgetting factors (Figure 7 items 1/Ki and Kif or similar (Figure 7 item A; column 1 lines 57-68 and column 2 lines 1-16).

However, neither Goto nor Sawai disclose the motor being a synchronous permanent magnet motor.

In re Stevens, 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art recognized need for adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious. In this case, the use of a synchronous permanent magnet motor connected to a feedback sensor is commonplace in the motor control art; wherein Goto's reference the speed of the motor is measured thus performing all the tasks in the claims. The use of a synchronous permanent magnet motor is a minor adjustment of the current invention.

3. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al (5828014) and Sawai et al (4967128). as applied to claims 9 and 12 above, and further in view of Ikejima (4625159).

Goto discloses a elevator speed control circuit which includes a measuring unit (Figure 9) for measuring a speed value of a motor; a calculating unit (Figure 9 item 2) for calculating averages of a speed reference and a speed measurement from the measured speed value; an identifying unit (Figure 9 item 3 and Figure 9 item 36) for identifying a gain factor and a zero factor', and a correcting unit (Figure 9 item 51) for compensating a drift in the measuring unit, the correcting unit compensating for the drift on the basis of the average of the speed reference, the average of the speed measurement, the identified gain factor, the identified zero factor, and on the basis of a forgetting factor. Refer to the abstract, column 2 lines 21-64 and column 6 lines 44-58.

However, Goto does not disclose the use of a forgetting factor or similar for updating the gain factors.

Sawai discloses a servo motor control device which includes forgetting factors (Figure 7 items 1/Ki and Kif or similar (Figure 7 item A; column 1 lines 57-68 and column 2 lines 1-16).

However, neither Goto nor Sawai disclose the motor being a synchronous permanent magnet motor.

In re Stevens, 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art recognized need for adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior art would have been obvious. In this case, the use of a synchronous permanent magnet motor connected to a feedback sensor is commonplace in the motor control art; wherein Goto's reference the speed of the motor is measured thus performing all the tasks in the claims. The use of a synchronous permanent magnet motor is a minor adjustment of the current invention.

However, neither Goto nor Sawai disclose a sensor being a tachometer. Ikejima discloses a control apparatus for an elevator which includes the use of a tachometer (Figure 1 item 11) as a sensor.

It would have been obvious to one of ordinary skill in the art at the time of invention to provide a tachometer for sensing the speed of the motor. Advantage is more accurate and direct reading of motor speed, which is common in the motor control art.

Allowable Subject Matter

4. Claims 1-8, 10 and 11 allowed.

Response to Arguments

5. Applicant's arguments filed May 18, 2007 have been fully considered but they are not persuasive.

Applicant argues that the references of Goto and Sawai do not disclose the use of a forgetting factor. Examiner takes Applicant arguments in full consideration.

Examiner believe that the forgetting factor is a weighting coefficient that defines how much old data and how much new data is used for calculating a new value for tachometer gain factor or zero factor. Therefore, Sawai includes forgetting factors (Figure 7 items $1/K_i$ and $K_i f$ or similar (Figure 7 item A; column 1 lines 57-68 and column 2 lines 1-16) and calculating a new value for tachometer gain factor or zero facto which would be K_i of Figure 1 item 6. Examiner gives the broadest reasonable interpretation of the claim. Examiner suggests that the Applicant amends the claim to express how the forgetting factor is developed and used to identify or generate the gain and zero factors.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan, can be reached on 571-272-2800 ext 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

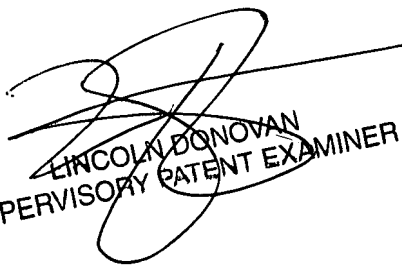
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone Smith
Patent Examiner

Art Unit 2837



LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER